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| APPLICATION NO.               | FILING DATE     | FIRST NAMED INVENTOR | `ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-------------------------------|-----------------|----------------------|----------------------|------------------|
| 10/759,505                    | 01/16/2004      | Guillermo C. Bazan   | LA-1279-400-C1US     | 7669             |
| Dahasi Dashas                 | 7590 01/28/2009 | 6                    | EXAM                 | INER             |
| Robert Berliner BERLINER &    | ASSOCIATES      |                      | THOMPSON, CAMIE S    |                  |
| 31st Floor<br>555 W. Fifth St | treet           | •                    | ART UNIT             | PAPER NUMBER     |
| Los Angeles, CA 90013         |                 |                      | 1794                 |                  |
|                               |                 |                      |                      |                  |
|                               |                 |                      | MAIL DATE            | DELIVERY MODE    |
|                               |                 | ·                    | 01/28/2008           | PAPER            |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|  | Application No.   | Applicant(s)   |  |  |  |  |
|--|---|--|--|--|--|--|
| •  | 10/759,505  | BAZAN ET AL.   |  |  |  |  |
| Office Action Summary  | Examiner  | Art Unit   |  |  |  |  |
| •  | Camie S. Thompson   | 1794   |  |  |  |  |
| The MAILING DATE of this communication app   |   |  |  |  |  |  |
| Period for Reply   |   |  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | N. nely filed the mailing date of this communication. D (35 U.S.C. § 133). |  |  |  |  |
| Status   |   |  |  |  |  |  |
| 1) Responsive to communication(s) filed on Amer  | ndment filed 10/26/07.  |  |  |  |  |  |
| , —  | •   |  |  |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is   |   |  |  |  |  |  |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  |   |  |  |  |  |  |
| Disposition of Claims  |   |  |  |  |  |  |
| 4)⊠ Claim(s) <u>4,5,12-15 and 18-23</u> is/are pending in the application.   |   |  |  |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.   |   |  |  |  |  |  |
| 5)⊠ Claim(s) <u>15, 20-22</u> is/are allowed.  |   |  |  |  |  |  |
| 6)⊠ Claim(s) <u>4,5,12-14,18,19 and 23</u> is/are rejected.  |   |  |  |  |  |  |
| 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/o   | r election requirement.   |  |  |  |  |  |
| are cubject to recursion unare   |   | ·  |  |  |  |  |
| Application Papers   |   |  |  |  |  |  |
| 9) The specification is objected to by the Examine   |   |  |  |  |  |  |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.   |   |  |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  |   |  |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.   |   |  |  |  |  |  |
| ,  |   | ,  |  |  |  |  |
| Priority under 35 U.S.C. § 119   |   |  |  |  |  |  |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  |   |  |  |  |  |  |
| a) ☐ All b) ☐ Some * c) ☐ None of:  1. ☐ Certified copies of the priority documents have been received.  |   |  |  |  |  |  |
| Certified copies of the priority documents have been received in Application No  |   |  |  |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage  |   |  |  |  |  |  |
| application from the International Bureau (PCT Rule 17.2(a)).  |   |  |  |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.   |   |  |  |  |  |  |
|  |   |  |  |  |  |  |
|  |   | :  |  |  |  |  |
| Attachment(s)  |   |  |  |  |  |  |
| 1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  Paper No(s)/Mail Date   |   |  |  |  |  |  |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date   | 5) Notice of Informal F   |  |  |  |  |  |

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## **DETAILED ACTION**

- 1. Applicant's amendment and accompanying remarks filed October 26, 2007 are acknowledged.
- 2. Examiner acknowledges amended claims 4-5, 12-15 and 18-22.
- 3. Examiner acknowledges newly added claim 23.
- 4. The objection to claims 4-5, 12-15 and 18-22 is overcome by applicant's amendment.

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 4-5, 12-14, 18-19 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toguchi et al., U.S. Patent Number 6,582,837.

Toguchi discloses an organic electroluminescence device having one or more organic thin layers including a luminescent layer between an anode and a cathode wherein at least one of the organic thin layers includes a binaphthyl compound such as

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The reference reads on the instant claims when R<sub>2</sub><sup>1</sup> to R<sub>2</sub><sup>14</sup> represents hydrogen, a substituted or unsubstituted alkoxy group, an aromatic hydrocarbon and aromatic heterocycle (see column 11, line 20-column 12, line 54). The figures in the reference disclose an electron-transporting layer (hole blocking layer) sandwiched between the luminescent layer and the cathode. The Toguchi reference reads on instant claims 4-5 when R<sub>2</sub><sup>1</sup> and R<sub>2</sub><sup>8</sup> of the reference are alkoxy groups (or hydrogen for instant claims 18-19) and n<sup>1</sup> and n<sup>2</sup> of the instant claims are zero and Ar<sup>1</sup> and Ar<sup>2</sup> are an aromatic hydrocarbon. Therefore, it would have been obvious to apply the substitutions as required by the instant claims in order to have improved luminance. Toguchi clearly renders the binaphthyl compounds of the present claims obvious.

3. Claims 15 and 20-22 are allowed. The prior art does not provide for the recited binaphthyl compounds as claimed in claims 15 and 20-22.

## Response to Arguments

4. Applicant's arguments with respect to the instant claims have been considered but are not persuasive. Applicant argues that Toguichi does not render obvious the binaphthyl framework

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as required by the present claims. Applicant argues that the Toguichi reference does not disclose the particular positions on the binaphthyl framework as presently claimed. Toguchi does disclose formula II-1, which renders obvious the compounds found in the present claims.

Toguchi discloses

$$R_{2}^{5}$$
 $R_{2}^{10}$ 
 $R_{2}^{10}$ 
 $R_{2}^{10}$ 
 $R_{2}^{10}$ 
 $R_{2}^{10}$ 
 $R_{2}^{10}$ 
 $R_{2}^{10}$ 

Toguchi discloses substitutions that can be hydrogen; substituted or unsubstituted alkoxy groups and substituted or unsubstituted aromatic heterocycle. R<sub>2</sub><sup>5</sup> and R<sub>2</sub><sup>12</sup> of the Toguichi reference allows for a substitution of a substituted or unsubstituted aromatic heterocycle as required by the present claims. Applicant argues that the Toguichi reference shows generic formulas that encompasses an infinite number of possibilities. Applicant's claims 4-5, 12-14 and 18-19 are drawn to a generic formula that encompasses an infinite number of possibilities. The Toguichi reference encompasses the same possibilities provided by the present claims. It would be obvious to make the necessary substitutions in order to improve the luminescence. The rejection is not without motivation. The rejection is maintained.

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5. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Camie S. Thompson whose telephone number is (571) 272-1530. The examiner can normally be reached on Monday through Friday from 7:30 am to 4:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached at (571) 272-1478. The fax phone number for the Group is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

APL /Arti Singh/ Primary Patent Examing 1791 Primary Patent Examing 1791